# AGENT ORANGE

Information for Veterans Who Served in Vietnam

### GENERAL INFORMATION



### **Environmental Agents Service**

Department of Veterans Affairs 810 Vermont Avenue, N.W. Washington, DC 20420

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#### Agent Orange was used in Vietnam to help U.S. troops.

Agent Orange was a herbicide used in Vietnam to kill unwanted plants and to remove leaves from trees which otherwise provided cover for the enemy. The name, "Agent Orange," came from the orange stripe on the 55-gallon drums in which it was stored. Other herbicides, including Agent White and Agent Blue, were also used in Vietnam to a much lesser extent.

## Some Vietnam veterans are concerned about the long-term effects of exposure to Agent Orange.

In the 1970's some veterans became concerned that exposure to Agent Orange might cause delayed health effects. One of the chemicals in Agent Orange contained minute traces of TCDD or dioxin, which caused a variety of illnesses in laboratory animals. More recent studies have suggested that the chemical may be related to a number of types of cancer and other disorders.

#### When and where Agent Orange was used in Vietnam.

Fifteen different herbicides were shipped to and used in Vietnam between January 1962 and September 1971. Over 80 percent of the herbicides sprayed in Vietnam was Agent Orange, which was used between January 1965 and April 1970. Herbicides other than Agent Orange were used in Vietnam prior to 1965, but to a very limited extent. The total area sprayed with herbicides between 1962 and 1965 was small. Before the end of the spraying in 1971 more than 20 million gallons of herbicides were sprayed over 6 million acres, some of which were sprayed more than once. Spraying occurred in all 4 military zones of Vietnam.

Heavily sprayed areas included inland forests near the demarcation zone; inland forests at the junction of the borders of Cambodia, Laos, and South Vietnam; inland forests north and northwest of Saigon; mangrove forests on the southernmost peninsula of Vietnam; and mangrove forests along major shipping channels southeast of Saigon.

#### What concerned Vietnam veterans can do.

In 1978, the Veterans Administration, now known as the Department of Veterans Affairs (VA), set up the Agent Orange Registry health examination program for Vietnam veterans who were concerned about the possible long-term medical effects of exposure to Agent Orange. Vietnam veterans who are interested in participating in this program should contact the nearest VA medical center for an examination.

#### What a veteran can expect from this examination.

Veterans who participate in the examination program are asked a series of questions about their possible exposure to herbicides in Vietnam. A medical history is taken, a physical examination is performed, and a series of basic laboratory tests, such as a

chest x-ray (if appropriate), urinalysis, and blood tests are done. If the examining physician finds that it is medically justified, consultations with specialists are scheduled. However, no special Agent Orange tests are offered since there is no test to show if a veteran's medical problem was caused by Agent Orange or other herbicides used in Vietnam. There are tests that show the dioxin levels in fat and blood, but such tests are not done by VA because there is serious question about their value to veterans. Also, VA policy assumes that all Vietnam veterans were exposed to Agent Orange.

In its 1994 report on Agent Orange, the National Academy of Sciences (NAS) concluded that individual TCDD levels in Vietnam veterans are usually not meaningful because of common background exposures to TCDD, poorly understood variations among individuals in TCDD metabolism, relatively large measurement errors, and exposure to herbicides that did not contain TCDD.

#### How a veteran benefits from taking VA's Agent Orange Registry examination.

The veteran is informed of the results of the examination during a personal interview and gets a follow-up letter further describing the findings. Each veteran is given the opportunity to ask for an explanation and advice. Where medically necessary, a follow-up examination or additional laboratory tests are scheduled. The examination and tests sometime reveal previously undetected medical problems. These discoveries permit veterans to get prompt treatment for their illnesses. Some veterans feel they are in good health, but are worried that exposure to Agent Orange and other substances may have caused some hidden illness. The knowledge that a complete medical examination does not show any problems can be reassuring or helpful to Registry participants. All examination and test results are kept in the veteran's permanent medical record. These data are entered into the VA Agent Orange Registry.

#### Vietnam veterans can get medical treatment for Agent Orange-related illnesses.

Under Section 102, Public Law 104-262, the Veterans' Health Care Eligibility Reform Act of 1996, VA is required to furnish hospital care and medical services, and may furnish nursing home care to veterans exposed to herbicides in Vietnam. There are some restrictions. VA cannot provide such care for a (1) disability which VA determines did not result from exposure to Agent Orange, or (2) disease which the NAS has determined that there is "limited/suggestive" evidence of no association between occurrence of the disease and exposure to a herbicide agent. The 1998 update, released by the NAS in February 1999, identified the following conditions as "limited/suggestive evidence of no association": gastrointestinal tumors (stomach cancer, pancreatic cancer, colon cancer, rectal cancer), and brain tumors.

## Some Vietnam veterans get disability compensation for Agent Orange-related illnesses.

VA pays disability compensation to Vietnam veterans with injuries or illnesses incurred in or aggravated by their military service. Veterans do not have to prove that Agent

Orange caused their medical problems to be eligible for compensation. Rather, VA must determine that the disability is "service-connected." A Veterans Benefits Counselor, at a VA medical center or regional office, can explain the compensation program in greater detail and assist veterans who need help in applying. For more information about the VA disability compensation program, call toll-free: 1-800-827-1000.

# VA has recognized a number of conditions for "service-connection" based on evidence of an association with Agent Orange (or other herbicides used in Vietnam).

The number of diseases that VA has recognized as associated with, but not necessarily caused by, Agent Orange exposure has expanded considerably during the 1990's. The following conditions are recognized for service-connection for these veterans: chloracne (a skin disorder), porphyria cutanea tarda, acute or subacute peripheral neuropathy (a nerve disorder), and numerous cancers [non-Hodgkin's lymphoma, soft tissue sarcoma, Hodgkin's disease, multiple myeloma, prostate cancer, and respiratory cancers (including cancers of the lung, larynx, trachea, and bronchus)]. In addition, Vietnam veterans' children with the birth defect spina bifida are eligible for certain benefits and services. Furthermore, VA has recently proposed that certain benefits, including health care be authorized for children with birth defects who were born to women Vietnam veterans. VA has also asked the IOM for a special review of the relationship between exposure to herbicides in Vietnam and the development of diabetes.

## Other VA efforts are underway to help Vietnam veterans who were exposed to Agent Orange.

In addition to the efforts described above, (that is, Agent Orange Registry examination program, medical treatment, and disability compensation), VA is doing research now to learn more about the possible adverse health effects of military service in Vietnam. The Environmental Epidemiology Service (EES) is the premiere office for Vietnam/Agent Orange related research within VA. EES investigators have completed numerous studies on this subject.

#### What other government departments and agencies are doing.

Many other Federal departments and agencies have pursued and/or are conducting scientific studies on this subject. The Centers for Disease Control and Prevention (CDC), Air Force (USAF), National Institute for Occupational Safety and Health (NIOSH), National Cancer Institute (NCI), and Environmental Protection Agency (EPA) have all been involved in research.

In 1994, the CDC published an important study, partially funded by VA, regarding Vietnam veterans' risks of fathering babies with birth defects. VA also funded the CDC Vietnam Experience Study published in 1987 and 1988, and the CDC Selected Cancers Study published in 1990. The USAF is conducting a long-term study of illnesses and

death among the men involved in the herbicide spraying missions. Air Force researchers have issued numerous reports regarding their findings in this ongoing project.

Several States have undertaken research efforts to learn more about the possible health effects of Agent Orange and the Vietnam experience upon our Nation's veterans.

## The National Academy of Sciences' Institute of Medicine has a major role in this issue.

Under Public Law 102-4, the Agent Orange Act of 1991, the Institute of Medicine (IOM) of the National Academy of Sciences, a non-governmental organization, has reviewed and continues to evaluate all relevant scientific literature and to provide advice to the Secretary of Veterans Affairs on issues relative to herbicides exposure. The IOM project is being undertaken in accordance with Public Law 102-4. The IOM reported its initial findings in July 1993. Updates were released in March 1996 and February 1999. Future reports are anticipated every two years. The IOM and its subcontractor are also considering the feasibility of developing a historical herbicide exposure reconstruction model that could be used in Agent Orange-related research efforts.

## Some people believe that a large-scale study can be completed with the latest technologies.

In July 1997, in response to IOM recommendations, VA announced a research initiative designed to determine whether it is possible to conduct a large-scale study of the long-term health effects of exposure to Agent Orange (and other herbicides used in Vietnam) on Vietnam veterans. Although this project is still ongoing, it is unclear whether a large-scale study is possible.

#### Additional information is available.

There is at each VA medical center a "Registry Physician" responsible for the conduct of Agent Orange Registry exams. These doctors participate in national conference calls and receive frequent mailings from VA headquarters updating them on the latest developments on Agent Orange issues. Each facility also has an "Agent Orange Registry Coordinator" to facilitate the Agent Orange program.

The Agent Orange Review newsletter, prepared by the VA Environmental Agents Service, provides updated information about Federal government studies and activities related to Agent Orange and the Vietnam experience. Registry participants are automatically added to the mailing list, others can contact the EAS at the address below.

The Agent Orange Brief fact sheets, prepared and updated by the VA Environmental Agents Service (EAS), are available from EAS and at VA medical centers. The following Agent Orange Briefs are now available: A1.General Information; A2.Class Action

Lawsuit; B1.Agent Orange Registry; B2.Health Care Eligibility; B3.Disability Compensation; B4.Information Resources; C1.The Problem Encountered in Research; C2.Agent Orange/ Vietnam Related Research-VA Efforts; C3.Agent Orange/Vietnam Related Research-Non-VA Efforts; D1.Birth Defects; D2.Chloracne; D3.Non-Hodgkin's Lymphoma; D4.Soft Tissue Sarcomas; D5.Peripheral Neuropathy; D6.Hodgkin's Disease; D7.Porphyda Cutanea Tarda; D8.Multiple Myeloma; D9.Respiratory Cancers; D10.Prostate Cancer; D11.Spina Bifida, D12.Diabetes.

The EAS (131), Department of Veterans Affairs, 810 Vermont Ave., N.W., Washington, DC 20420, is a good source of information on this subject. The telephone number is 202-273-8580.

Veterans service organizations and State government entities (including Agent Orange Commissions, Departments or Divisions of Veterans Affairs, Departments of Health) have also been helpful to individuals seeking information on this subject.

The initial and follow-up IOM reports are available for purchase from the National Academy Press, 2101 Constitution Avenue, N.W., Lockbox 285, Washington, DC 20055. The telephone numbers are 1-800-624-6242 and 202-334-3313. Copies of both books were sent to all VA medical center libraries.

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